TITLE 326 AIR POLLUTION CONTROL BOARD

Fiscal Impact Statement

LSA Document #05-116

Agency: Indiana Department of Environmental Management (IDEM)

Rule Number: #05-116

Rule Topic: Clean Air Mercury Rule (CAMR)

Rule Summary

The draft rule adopts a mercury trading program for coal-fired electricity generating units (EGUs), larger than 25 megawatts, producing electricity for sale by adding 326 IAC 24-4. This rule is required under the federal Clean Air Mercury Rule (CAMR) published in the Federal Register on May 18, 2005 (70 FR 28606; May 18, 2006). CAMR establishes a cap on mercury emissions from EGUs in two phases (Phase I starting in 2010 and Phase II starting in 2018). CAMR is a cap and trade program that allows interstate trading and banking of allowances. EGUs demonstrate compliance by holding one allowance for each ounce of mercury emitted in any given year. The CAMR Phase 1 cap for Indiana is 4,194 pounds and the Phase II is 1,656 pounds. In Indiana, there are 71 units, eight of which have either shut down or repowered and will initially receive mercury allowances under the cap and trade program, at nine companies that are affected by this rule. The Indiana Air Pollution Control Board (APCB) also has pending a rulemaking petition from the Hoosier Environmental Council (HEC) to regulate EGUs to control mercury emissions by 90% or to meet a mercury emission rate equal to 0.6 lb/trillion Btu, whichever is more readily achievable. The petition allows plant-wide emissions averaging as compliance flexibility.

Fiscal Impact

CAMR is required under federal law; the draft rule is based on CAMR. If Indiana does not adopt a rule that is at least as stringent as CAMR, the U.S. EPA would adopt and implement a federal plan in Indiana. A federal plan for CAMR means that Indiana would lose the ability to establish an allocation methodology for mercury allowances that works best for Indiana. However, IDEM is presenting a range of fiscal impacts with the cost of CAMR (draft rule language) at the low end (this fiscal impact is imposed by the federal rule and not the state) and the cost of the HEC petition at the high end (Table 1). Should the APCB provide direction to pursue alternatives to the draft rule or there are significant changes to the draft rule, the costs of the rule would be greater than the estimated costs for the CAMR-based draft rule language, but would fall somewhere in this range. Both IDEM and the Indiana Utility Group (IUG) have estimated the impact of the draft rule based on CAMR and the HEC petition.

Table 1: Summary of Mercury Control Impacts

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Phase I (2010)	IDEM	IUG
*Total annual cost (retrofit controls+ emission monitoring+allowance trading), million \$	-26	-1
Increase in electricity rates (incremental to CAIR), % Phase 2 (2018)	-0.24%	0.14%
Total annual cost (retrofit controls+ emissions monitoring+allowance trading+additional capacity), million \$	64	68
Increase in electricity rates (incremental to CAIR),%	0.79%	1.06%
HEC Petition (beginning 2010)		
	IDEM	IUG
*Total annual cost (retrofit controls+ emissions monitoring), million \$	207	373
Increase in electricity rates (incremental to CAIR), %	2.80%	5.00%

Draft Rule 326 IAC 24-4 (Based on Federally Required CAMR)

Fiscal Impact on State and Local Government

The draft rule based on CAMR impacts 1 state or local source: Richmond Power & Light (RP & L). RP & L has two operating units. Both IDEM and IUG cost analyses project that Unit 1 will be retired beginning in 2010. The cost estimates include emissions monitoring and allowance trading costs on the source. The IDEM analysis projects a cost of \$3,500 annually for Phase 1 and net revenue of \$323,500 annually for Phase II. The IUG analysis projects net revenue of \$734,250 for Phase 1 and \$415,250 annually for Phase II, indicating that the source will have surplus allowances to trade in both phases.

Under the HEC petition there would be retrofit control and emissions monitoring costs on the source. Both IDEM and IUG estimate that the source will be required to meet a 90% emissions reduction and will install activated carbon injection plus fabric filter (ACI+FF) to achieve that reduction. The total annual cost of emissions monitoring and retrofit control is estimated between \$2 million (IUG) and \$2.6 million (IDEM) beginning in 2010.

Small Business Fiscal Impact

This rule does not apply to small businesses, but electricity rates for small businesses could increase as described in Table 1.

Additional Rule Information

Mercury emissions are a health concern because once mercury is released to the air from coal combustion and other sources mercury can fall to the earth through wet and dry deposition. After it settles in lake or river sediments, mercury can be converted by bacteria into methylmercury, a more toxic form of mercury. Methylmercury can build up in fish tissue and be consumed by people and wildlife. Those at greatest risk from exposure include children where the effects from prenatal exposure can occur even at doses that do not result in effects in the mother. The HEC also submitted a petition to reduce mercury emissions from coal-fired EGUs to the APCB requesting that the board regulate EGUs to control mercury emissions by 90% or meet an emission rate equal to 0.6 lb/trillion Btu, whichever is more readily achievable. The petition allows plant-wide emissions averaging as compliance flexibility, but no interstate trading.

Sources of Information

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